

NEW OMMATIUS WITH A KEY TO THE SPECIES (DIPTERA, ASILIDAE)

By J. WILCOX, Division of Truck Crop and Garden Insect Investigations, Bureau of Entomology and Plant Quarantine,
United States Department of Agriculture,
Puyallup, Washington.¹

In this paper on the genus *Ommatius* Wiedemann, two species are described as new, a key to the species known to occur in the United States is given, and figures of the male genitalia of those species represented by male specimens are included to facilitate the determination of the species. A single specimen each of two other species which may be new is at hand, but they are not described as further collecting may show them to be variations of *O. tibialis* Say. One, from Texas (San Antonio, VI-13 '33, G. P. Engelhardt), has the femora wholly yellowish but with male genitalia similar to those of *tibialis*, and the other, from Florida (Ft. Lauderdale, VI-23 '33, Marston Bates), has the apices of the femora black and the male forceps apically more acute and slender than in *tibialis*; Williston² mentions a similar specimen from Georgia. References to the descriptions of the species described since the Aldrich Catalogue are given in the key; Williston² gives a description of *tibialis*.

The genus *Ommatius* Wiedemann belongs in the subfamily Asilinae and differs from the other genera in having the style of the antennae long and pectinate below;³ the metanotal slopes are bare. Curran⁴ has given a key to the American species and described several new species, none of which, however, were from the United States.

KEY TO THE SPECIES OF OMMATIUS

1. Marginal scutellar bristles present 2
Marginal scutellar bristles absent 5
2. Legs wholly black except the tibiae narrowly reddish at the base; bristles of the body and legs largely white; abdomen wholly black in ground color; length 7-8 mm. (Ariz.)
beameri, n. sp.

¹ The writer is indebted to Dr. R. H. Beamer, University of Kansas, and to Mr. E. P. Van Duzee, California Academy of Sciences, for the loan of specimens, and to Dr. Marston Bates, Mr. G. P. Engelhardt, and Mr. D. K. Duncan, for supplying specimens.

² Trans. Amer. Ent. Soc. XII: 76, 1885.

³ Curran, North American Diptera: 166, fig. 27, 1934.

⁴ Amer. Mus. Novitates No. 327: 1-6, 1928.

- At least the fore and middle femora largely, and the tibiae largely, yellowish; bristles largely black; abdomen largely yellowish or brownish in ground color; larger species . . . 3
3. Mesonotum anteriorly with numerous erect hairs about as long as the first antennal joint and posteriorly with numerous longer hairs; basal petiole of the fourth posterior cell twice as long as the anterior cross vein; length 18-19 mm. (Ariz.) *baboquivari*, n. sp.
 Mesonotum anteriorly with very sparse, short hairs and posteriorly without longer hairs except in the dorsocentral rows and below the supra-alars; petiole at base of the fourth posterior cell at most subequal in length to the anterior cross vein; smaller species 4
4. Third vein branching at or before the discal cross vein; femora of both sexes, if blackish, blackish on the apical fourth only; length 9-11 mm. (N. C., Miss., Ark., Okla.) (Jour. Elisha Mitchell Scien. Soc. XLIII: 205, 1928).
gemma Brimley
 Third vein branching well beyond the discal cross vein; basal two-thirds of the male hind femora black and the middle half of the female hind femora brownish; length 11-13 mm. (Ariz.) (Canad. Ent. XLIII: 129, 1911).
pretiosus Banks
5. Mesonotum with the broad central stripe and a broad stripe on either side, bisected by the transverse suture, shining black; male femora largely black, female femora yellowish, the apical fourth black; wings glassy hyaline; length 9-11 mm. (Ariz.) (Canad. Ent. XLIII: 128-129, 1911)
maculatus Banks
 Mesonotum wholly pollinose 6
6. Fore femora entirely and the middle femora, except at the tip, yellowish; segments 1 and 8 of the abdomen reddish; length 11-12.5 mm. (Ariz.) (Amer. Mus. Novitates No. 813: 9, 1935) ♀♀ *bromleyi* Pritchard
 At least the anterior side of the fore and middle femora black; abdomen wholly black in ground color 7
7. Femora entirely black except the hind femora narrowly reddish at the base; male costa not at all thickened or clouded; length 9-11 mm. (Ariz.) (Jour. N. Y. Ent. Soc. XXIV: 69, 1916) *parvulus* Schaeffer
 Posterior side of the fore and middle femora yellowish; male costa broadly thickened and the adjacent cells clouded brown; length 12-16 mm. (Eastern States and West to Kans., Okla., and Tex.) *tibialis* Say

Ommatius beameri, n. sp.

Male: Length 7 mm. Face densely white pollinose, front and vertex thinly brownish pollinose, the occiput densely gray pollinose, the palpi, proboscis, and ocellar tubercle shining black. Hairs and bristles white, the mystax dense, the ocellar tubercle with about 8 weak erect bristles. Antennae black, the joints subequal in length, the first joint white haired and the second largely black haired, the style about 5 times as long as the third joint and with about 16 long black hairs below.

Mesonotum black, gray pollinose, the central and lateral stripes brownish; hairs long white, as long as the 3 antennal joints together, the lateral stripes bare of hairs; bristles white, 2 presutural, 1 supraalar, 1 postalar, and 3 strong posterior dorsocentral. Scutellum gray pollinose and long white haired with 4 white marginal bristles. Pleura and coxae densely gray pollinose and white pilose.

Abdomen black, gray pollinose and fine white haired. Genitalia small, shining black, and densely white haired.

Legs black, the tibiae narrowly brownish at base; hairs white; bristles white, some of those on the tarsi black; claws black, broadly reddish basally; pulvilli yellowish. A double row of bristles below on the hind femora, the anterior bristles being finer and longer than the posterior ones.

Squamae brownish, the margin and fringe white. Halteres yellowish white, the base and lower stem brown. Wings hyaline, the veins brown, yellowish basally; the basal petiole of the fourth posterior cell slightly longer than the anterior cross vein; anterior cross vein at the middle of the discal cell; third vein branched beyond the discal cross vein.

Female: Length 8 mm. Similar. Hairs of the mystax not as dense as in the male and only 2 scutellar bristles present.

Abdomen (segments 1-8) wholly pollinose.

Holotype: Male, Patagonia, Ariz., VIII-21 '35 (R. H. Beamer), in the Snow Collection, University of Kansas.

Allotype: Female, same data, in the Snow Collection, University of Kansas.

Paratypes: 2 females, same data, in the writer's collection.

Ommatius baboquivari, n. sp.

Male: Length 19 mm. Head densely yellowish white pollinose, the palpi brown and the proboscis black. Hairs white except 6 longer bristles in the mystax and 2 short, fine, erect bristles on the ocellar tubercle, black. First two joints of the

antennae yellow, the third and the style brown; first two joints white haired, the style $6\frac{1}{2}$ times as long as the third joint and with about 16 ventral hairs.

Mesonotum densely yellowish gray pollinose, the central stripe and lateral spots indistinctly brown. The numerous erect hairs black except those on the humeri and lateral margins yellowish, anteriorly the hairs about as long as the first antennal joint and posteriorly about as long as the 3 joints together. Bristles black, 2 presutural, 1 supra-alar, 2 postalar, and 3-4 fine posterior dorsocentral. Scutellum, metanotum, pleura, and coxae densely yellowish pollinose; scutellum with a pair of black marginal bristles and a few erect black hairs apically; pleura and coxae white haired. The coxae, pleura, and humeri are apparently yellowish in ground color.

Abdomen brownish in ground color and thinly yellowish gray pollinose; hairs yellowish, long on the sides of segments 1-3, short recumbent otherwise, the narrow dorsum of segments 1-8, and segments 7-8 posteriorly, black haired. Segment 1 with 2-3 black lateral bristles, and the remaining segments with a posterior row of weaker bristles, yellowish on segments 2-5, black on segments 6-8. Venter yellowish gray pollinose, segments 1-3 with numerous fine erect yellowish hairs; segments 4-7 with numerous erect stout brownish bristles, those on segments 4-5 pointed apically and those on segments 6-7 blunt apically; segment 8 with long, fine black and yellow hairs. Genitalia shining yellowish red, as long as segments 6-8 together, bare, the upper forceps basally with black hairs, the cerci short black pilose above and yellowish pilose below.

Legs entirely yellowish, the hind femora with a small brown spot posteriorly at about two-thirds its length. Femora largely black haired, the hairs ventrally and posteriorly on the fore femora, the middle femora except dorsally, and the hind femora except the basal half dorsally and ventrally, yellowish. Tibiae short black haired and with long yellowish hairs posteriorly on the fore tibiae, and ventrally on the middle and hind tibiae. Tarsi black haired; claws black, narrowly reddish at base; pulvilli yellow. Bristles black, the fore and middle femora without ventral bristles, the hind femora below with a double row of 3 bristles each, hind trochanters each with 2 weak black bristles.

Squamae and halteres yellow, the former with a yellowish fringe. Wings hyaline, grayish villous apically, the veins dark

brown, the fourth posterior cell basally with a petiole about twice as long as the anterior cross vein, anterior cross vein at about seven-twelfths the length of the discal cell, the third vein branched well beyond the discal cross vein.

Female: Length 18 mm. Similar. Largely greased and in this condition the humeri, lateral margins of the mesonotum, postalar calli, scutellum, metanotum laterally, and the pleura and coxae except a black spot below on the mesosternum and metasternum, yellowish in ground color. Hairs on the second antennal joint black, 2 of the occipital bristles on either side black, the hairs of the mesonotum shorter than in the male, and the scutellum yellowish haired. Venter of abdomen with short, fine recumbent yellow hairs, segments 7-8 shining brownish and largely black haired. Femora and tibiae lacking the long yellowish hairs of the male.

Holotype: Male, Baboquivari Mts., Ariz., VII-19 '32 (R. H. Beamer), in the Snow Collection, University of Kansas.

Allotype: Female, Baboquivari Mts., Ariz., IX-1 to 15 '23 (O. C. Poling), in the California Academy of Sciences.

Paratypes: 1 male, same data as allotype, VIII-1 '24, in the California Academy of Sciences; and 1 female, El Oro Mine, Baboquivari Mts., Ariz., VIII-16 '32, 4,000 feet (D. K. Duncan), in the writer's collection.

This is apparently the largest species found in the United States, while *beameri* is apparently the smallest.

EXPLANATION OF PLATE X.

Male genitalia of *Ommatius* species; in each case the upper figure shows a dorsal view with the apex toward the bottom of the page, and the lower figure shows a lateral view with the apex toward the left-hand side of the page; all are drawn to the same scale.

Spruce on the Gaspe peninsula had been heavily attacked over an area of about 2,000 square miles in 1931 by the European spruce sawfly. In 1933 the area was 4,000 square miles, and now it is nearly 6,000.—N. Y. Sun.